

EARTH LEAKAGE DETECTION SYSTEM FOR BATHROOM FLOOR HEATING

Patent number: JP11168830
Publication date: 1999-06-22
Inventor: YANAGI SHINSUKE; TAKEUCHI SHINICHI;
KUWABARA NOBUMORI
Applicant: MATSUSHITA ELECTRIC IND CO LTD
Classification:
- **international:** H02H3/16; A47K4/00; G01R31/02
- **european:**
Application number: JP19970331434 19971202
Priority number(s): JP19970331434 19971202

Abstract of JP11168830

PROBLEM TO BE SOLVED: To forcibly break electricity even when water adheres to a charge part by burying a heater being constituted of an electrical heating element and an electrode on the floor of a bathroom, by short-circuiting both ends of the electrode for connecting to ground, and at the same time by providing an earth leakage-breaking means in the main power supply circuit of the electrical heating element. **SOLUTION:** An earth leakage breaker 21 being used as a leak-breaking means is provided at a commercial power supply 6, and is connected to the electrical heating element 1 of a heater via a switch 5 and equipment 7 and 8 for preventing temperature from excessively rising. On the other hand, the both ends of an electrode 22 of a heater are short-circuited and are connected to ground. When the floor of a bathroom cracks and the electrode 22 is exposed, this sort of circuit prevents earth leakage to a human body since the electrode 22 is connected to the ground. Also, when the floor of the bathroom cracks and an insulation covering 3 is broken, current flows to the ground from the electrode 22 via water from the electrical heating element 1, thus promptly activating the earth leakage breaker 21 connected to the main power supply circuit of a heater and hence stopping earth leakage.

Data supplied from the **esp@cenet** database - Worldwide